

UHF RFID DESKTOP READERS

U120-U UHF RFID Desktop Reader/Writer, USB, EPC Gen2, Flat Pad

The U120-U is a 10 mm thin USB desktop reader/writer for ISO 18000-6C (EPC Gen2) UHF tags, built for front desks and enrollment stations that issue or check UHF cards one at a time. It reads up to 0.5 m, writes up to 0.2 m and, by default, types tag data at the cursor like a USB keyboard.

- 10 mm flat pad — at 104 × 68 × 10 mm it is the thinnest housing in our UHF desktop range and lies flat beside a keyboard.
- Reads and writes EPC Gen2 — handles ISO 18000-6C tags at up to 0.5 m for reading and 0.2 m for writing, depending on tag and environment.
- Keyboard output by default — tag data is typed into the active text field, so a web form or spreadsheet can take it without an SDK.
- Adjustable RF power — output is set in software between 12.5 and 26 dBm to widen or shrink the read zone.
- USB bus power — runs from the 5 V USB supply, with no external power adapter.
- Same footprint as the L120-U and H120-U — shares the 104 × 68 × 10 mm flat housing family with our 125 kHz and 13.56 MHz desktop readers, which are black.



General	
Model	U120-U
Product type	UHF RFID desktop reader/writer
Form factor	Flat desktop pad
Color	White

Tags & reading	
Frequency	902–928 MHz (US band) or 920–925 MHz (China band); other regional bands on request
Air protocol	ISO 18000-6C / EPC Class 1 Gen 2
Supported tags	EPC Gen2 UHF tags (read and write)
Read range	Up to 0.5 m (depends on RF power, tag and environment)
Write range	Up to 0.2 m (depends on RF power, tag and environment)

Radio	
Antenna	Built-in 2 dBi circularly polarized antenna
RF output power	12.5–26 dBm, software adjustable
Frequency hopping	FHSS or fixed frequency, set by software
Operating modes	Active mode and passive mode; answer mode available but not recommended

Interface & output	
Interface	USB
Default output	Keyboard emulation (USB HID)
Optional build	USB virtual serial port (customized version)
Power	5 V DC from USB

Physical & environment	
Dimensions	104 × 68 × 10 mm
Operating temperature	-20 °C to +55 °C
Storage temperature	-40 °C to +85 °C

Works with

- ✓ ISO 18000-6C / EPC Class 1 Gen 2 UHF tags: cards, labels and inlays (read and write)
- ✓ Any application with a text field in focus, through keyboard-emulation output (default build)
- ✓ Host software that reads a serial port, through the USB virtual serial port build (on request)
- ✓ 902–928 MHz or 920–925 MHz band builds; other regional bands on request

Not designed for

- ✗ 125 kHz EM4100 cards — use the L120-U in the same housing family
- ✗ 13.56 MHz MIFARE and NFC cards — use the H120-U
- ✗ Other UHF air protocols such as ISO 18000-6B (not listed for this reader)
- ✗ Reading tags at a gate or doorway several meters away — see the integrated long-range UHF readers

OEM / ODM options (confirmed per order)

- ◆ Regional frequency band: 902–928 MHz or 920–925 MHz builds, other regional bands on request
- ◆ RF output power preset within 12.5–26 dBm to suit your read distance, on request
- ◆ Your logo on the white top cover and private-label packaging, confirmed in your quotation
- ◆ USB virtual serial port (virtual COM) build in place of keyboard output, on request
- ◆ Frequency hopping (FHSS) or a fixed channel preset before shipment, on request

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Specifications describe the standard version and may change without notice. Read range depends on the card or tag, mounting and environment. Pricing, configuration, lead time and terms are confirmed in your quotation.